

## REMARKS

Claims 1, 6-23, 26, 31, 32, and 75-77 are pending in the application. Claims 14, 15, 21-23, 26, and 31 have been withdrawn from the Examiner's consideration as drawn to the non-elected invention. Claims 1, 6-13, 16-20, 32, and 75-77 stand rejected. Claims 16, 17, and 77 have been amended. Reconsideration and allowance of Claims 1, 6-13, 16-20, 32, and 75-77 is respectfully requested.

### The Rejection of Claims 16-18 and 77 Under 35 U.S.C. § 112, Second Paragraph

Claims 16-18 and 77 stand rejected under 35 U.S.C. § 112, second paragraph, as indefinite. Claims 16, 18, and 77 have been amended. Withdrawal of this grounds for rejection is respectfully requested.

### The Rejection of Claims 1, 6, 7, 9-12, 16, 18, and 75-77 Under 35 U.S.C. § 103

Claims 1, 6, 7, 9-12, 16, 18, and 75-77 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,723,954, issued to Pieniak, in view of U.S. Patent No. 5,225,047, issued to Graef et al. Applicants respectfully traverse the rejection for the following reasons.

Contrary to the Examiner's statements, the Pieniak reference fails to teach or suggest a composite having first and second strata, each including a binder, as recited in the claimed invention. Applicants respectfully disagree with the Examiner's view that the Pieniak reference describes a second stratum that includes wood pulp fibers and a binder. The Examiner states that the reference's disclosure air-laying the second stratum onto the first stratum acts to bind the layers together and is therefore considered a binder. The Examiner states that such an interpretation is commensurate with the definition provided by applicant's specification of page 13. Applicants respectfully disagree.

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At page 13, lines 1-6, the specification states:

Suitable binders can include, but are not limited to, bonding agents such as thermoplastic and thermosetting materials, soluble bonding mediums used in combination with solvents, and wet strength agents. Alternatively, integral commingling and intimate contact between the composite strata can be achieved through mechanical processes, including, for example, hydroentanglement, embossing, tenderizing, and needling processes among others."

Applicants submit that the specification clearly defines binders as materials that are useful to bind fibers. Applicants further submit that the commonly understood meaning of the term "binder" is a material or agent that is effective in binding. Applicants believe that the Examiner has confused the binder present in each stratum of the composite with the transition zone that joins the first and second strata. As is clear from the above noted passage from the specification, mechanical processes are not binders. While applicants agree that the transition zone of the claimed invention includes fibers from the first and second strata that are commingled, it is clear from the specification and claims that commingling of the fibers in the transition zone does not equate to the presence of a binder in each of the first and second stratum as interpreted by the Examiner. Applicants maintain that the Pieniak reference simply fails to describe a structure having first and second strata, each including a binder, as in the claimed invention.

The Pieniak reference also fails to suggest or provide any motivation to make a structure having first and second strata, each including a binder, as in the claimed invention. The Pieniak absorbent structure has a facing sheet made of a nonwoven fabric and an absorbent batt in which some of the fibers of the batt extend into the facing sheet. See Abstract. The extended fibers promote wicking of liquid through the facing sheet into the batt and stabilize the batt. See Abstract. The batt of the absorbent structure described in the Pieniak reference is stabilized by fibers from the batt extending into the facing sheet. Because the batt is stabilized by having

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fibers extending into the facing sheet, no motivation exists to further add a binder to the structure's absorbent batt.

The teaching of the cited references, either alone or in combination, fails to teach, suggest, or provide any motivation to make the invention as claimed.

Regarding the "crosslinked fiber" recitation, the Pieniak reference simply fails to suggest any modification of the structure to include crosslinked fibers. The Graef reference fails to suggest the use of crosslinked fibers in a stratified composite. Absent some suggestion to combine the elements from the references cited by the Examiner, applicants respectfully submit that the *prima facie* case of obviousness is untenable.

Withdrawal of this grounds for rejection is respectfully requested.

The Rejection of Claim 8 Under 35 U.S.C. § 103

Claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,723,954, issued to Pieniak, in view of U.S. Patent No. 5,225,047, issued to Graef et al., and further in view of U.S. Patent No. 4,223,677, issued to Anderson. Applicants respectfully traverse the rejection for the following reasons.

The deficiencies of the Pieniak and Graef references noted above are not cured by the teaching of the Anderson reference. Because the teachings of the cited references, either alone or in any combination, fail to teach, suggest, or provide any motivation to make the invention as claimed, withdrawal of this grounds for rejection is respectfully requested.

The Rejection of Claims 1, 6, 7, 9-13, 16, 18, 75, and 76 Under 35 U.S.C. § 103

Claims 1, 6, 7, 9-13, 16, 18, 75, and 76 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,129,132, issued to Butterworth, in view of U.S. Patent No. 5,225,047, issued to Graef et al. Applicants respectfully traverse the rejection for the following reasons.

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The Butterworth reference describes an absorbent article having a first stratum 20 and a second stratum 32. The Examiner states that although the reference describes that the second stratum includes synthetic wood pulp fibers, the reference does not describe a stratum that includes crosslinked cellulosic fibers. The Examiner states that the Graef reference discloses that crosslinked fibers impart advantageous properties to absorbent structures, and that it would have been obvious to one of ordinary skill in the art to incorporate crosslinked fibers as described by Graef in the second stratum of the article described by Butterworth. Applicants respectfully disagree.

First, applicants wish to correct what appears to be a misunderstanding that the Examiner has with regard to the Butterworth reference's teaching relating to "synthetic wood pulp fibers". Contrary to the Examiner's statement, synthetic wood pulp fibers are not cellulosic fibers. At column 1, lines 14-20, the Butterworth reference states:

Synthetic polymeric fibers that have physical and morphological characteristics generally similar to wood pulp fibers produced from natural woods have been known for approximately 10 years. Examples of such fibers are the synthetic wood pulp fibers formed of polyethylene that are sold by Crown Zellerbach under the trademark SWP.

At column 1, lines 34-39, the Butterworth reference further states:

As used in this specification and the appended claims, the term "synthetic wood pulp fibers" means synthetic, water dispersible, thermoplastic, elongated, supple, randomly bent, polymeric fibers or fibrils generally similar in size and shape to conventional wood pulp fibers produced from naturally occurring woods.

It is clear that "synthetic wood pulp fibers" are synthetic and not cellulosic.

The fibrous material described in the Butterworth reference "utilizes synthetic wood pulp fibers in a high loft, low density, nonwoven fibrous material such as an air-laid web or fabric". See column 1, lines 45-47. The fibrous material has two layers, one of which includes the synthetic wood pulp fibers. See Abstract. Figure 13 of the reference shows a partial cross

sectional view of a typical diaper utilizing the material of the invention (i.e., the two layered, high loft, low density, nonwoven fibrous material) as a facing layer. See column 12, lines 32-34. The reference diaper is made of three principal elements, facing layer 92, batt 94, and backing sheet 96, with the facing sheet made up of layers 23 and 32. See column 12, lines 34-37.

The Examiner acknowledges that the Butterworth reference "does not disclose that the synthetic wood pulp fibers (cellulosic) are crosslinked". The Examiner concludes that it would have been obvious to modify the fibrous material described in the Butterworth reference to include the crosslinked fibers described in the Graef reference to arrive at the claimed invention because the Graef reference teaches that crosslinked fibers provide advantages in absorbent articles such as being stiffer and tending to hold retained liquid better under compressive forces as compared to untreated fibers. Applicants respectfully submit that, for those very reasons, one skilled in the art would not be motivated to include crosslinked cellulosic fibers in the fibrous material described in the Butterworth reference.

With reference to Figure 13, the fibrous material described by the Butterworth reference is a facing sheet in a diaper. The facing sheet (reference numeral 92) serves to rapidly acquire and then distribute acquired liquid to the underlying storage layer (see batt 94) where the acquired liquid is stored. Applicants submit that one skilled in the art would not be motivated to modify the fibrous material described by the Butterworth reference to include crosslinked cellulosic fibers because crosslinked cellulosic fibers tend to hold retained liquid better under compressive forces as compared to untreated fibers. Retention of liquid in the facing sheet would be contrary to its intended purpose of removing acquired liquid away from contact with the wearer's body. The Butterworth reference also describes the facing sheet as having "good hand and softness". See, for example, Claim 1. As noted by the Examiner, crosslinked cellulosic fibers tend to impart stiffness to articles that include crosslinked fibers. Because a

facing sheet and ideally has good hand and softness for the wearer's comfort, one skilled in the art would not be motivated to modify the fibrous material described by the Butterworth reference to include crosslinked cellulosic fibers.

The Butterworth reference fails to suggest the use of crosslinked fibers in any stratum of the article, and the Graef reference fails to suggest the incorporation of crosslinked fibers into a stratified composite. The teachings of the cited references, either alone or in combination, fail to teach, suggest, provide any motivation to make, or otherwise render obvious the claimed invention. Withdrawal of this grounds for rejection is respectfully requested.

The Rejection of Claim 8 Under 35 U.S.C. § 103

Claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,129,132, issued to Butterworth, in view of U.S. Patent No. 5,225,047, issued to Graef et al., and further in view of U.S. Patent No. 4,223,677, issued to Anderson. Applicants respectfully traverse the rejection for the following reasons.

The deficiencies of the Butterworth and Graef references noted above are not cured by the teaching of the Anderson reference. Because the teachings of the cited references, either alone or in any combination, fail to teach, suggest, or provide any motivation to make the invention as claimed, withdrawal of this grounds for rejection is respectfully requested.

The Provisional Rejection of Claims 1, 6-20, and 26 under 35 U.S.C. § 101

Applicants note the provisional rejection of Claims 1, 6-20, and 26 under 35 U.S.C. § 101 as claiming the same invention as that of Claims 1-23 and 25-32 of copending Application No. 09/620,947. On an indication of allowance of claims in this application, applicants will attend to this provisional rejection.

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The Provisional Obviousness-Type Double Patenting Rejection  
of Claims 1, 6-20, 24, 25, 32, 33, and 62-77 under 35 U.S.C. § 101

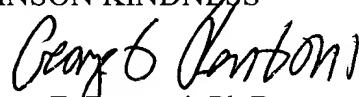
Applicants note the provisional rejection of Claims 1, 6-20, 24, 25, 32, 33, and 62-77 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the pending claims of several copending applications. On an indication of allowance of claims in this application, applicants will attend to this provisional rejection.

Conclusion

In view of the above amendments and foregoing remarks, applicants believe that Claims 1, 6-13, 16-20, 32, and 75-77 are in condition for allowance. If any issues remain that may be expeditiously addressed in a telephone interview the Examiner is encouraged to telephone applicants attorney at 206.695.1755.

Respectfully submitted,

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